

MT-001 ABSORPTION IN BUBBLE COLUMN



DESCRIPTION : The Absorption column should consist of Glass column . The device must equipped with a gas inlet and distributing space at the bottom, a liquid inlet and distributor at the top, gas and liquid outlet at top and bottom respectively. The gas and air are metered separately, mixed and then passed through the bed vertically upwards and absorbed in liquid . All the flow rates can be independently varied to simulate different conditions.

RANGE OF EXPERIMENTS :

1. To study the characteristics of absorption with chemical reaction.
2. To calculate the rate of absorption.
3. To calculate the interfacial area per unit volume

EXPERIMENTAL SETUP :

Column	:	Borosilicate Glass Column
Flow Measurement	:	3 No. Pre calibrated Rota meter
Feed Tank	:	1 No. of stainless steel feed tank
Product receiver	:	1 No. SS tank
Gas supply	:	1 No. of gas cylinder with Pressure Gauge
Piping	:	SS , PVC
Setup Mounting	:	On sturdy MS stand with powder coated

SPACE REQUIRED : 1.5 m. (L) x 1.0 m (W) X 2.5 m (H).

SERVICE REQUIRED: Air Supply : @ 6 CFM, at 4 Kg /cm²

CHEMICALS REQUIRED: NaOH, HCL, Phenolphthalein indicator ,
Distilled water

WEIGHT : @ 55 Kg